No. 1/1 CF-2007-18 Issue Date 04 September 2007

AIRWORTHINESS DIRECTIVE

The following airworthiness directive (AD) may be applicable to an aircraft which our records indicate is registered in your name. ADs are issued pursuant to **Canadian Aviation Regulation (CAR) 593**. Pursuant to **CAR 605.84** and the further details of **CAR Standard 625**, **Appendix H**, the continuing airworthiness of a Canadian registered aircraft is contingent upon compliance with all applicable ADs. Failure to comply with the requirements of an AD may invalidate the flight authorization of the aircraft. Alternative means of compliance shall be applied for in accordance with **CAR 605.84** and the above-referenced **Standard**.

This AD has been issued by the Continuing Airworthiness Division (AARDG), Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

Number: CF-2007-18

Fuel System Safety - Insufficient Electrical Bonding Between Fuel Boost Pump Subject:

Canister and the Pressure Pick-Up Line

Effective: 24 September 2007

Bombardier Inc. Model CL-600-2B19 aircraft, serial numbers 7003 through 7067 and Applicability:

7069 through 7797

Compliance: As indicated, unless already accomplished.

Background: Bombardier Aerospace has completed a system safety review of the CL-600-2B19 aircraft fuel system against new fuel tank safety standards, introduced in Chapter 525 of the

Airworthiness Manual through Notice of Proposed Amendment (NPA) 2002-043. The identified non-compliances were assessed using Transport Canada Policy Letter

No. 525-001 to determine if mandatory corrective action is required.

The assessment showed that if the fuel boost pump reducer coupling is anodized, insufficient electrical bonding between the boost pump canister and the pressure pick-up line could occur. Insufficient electrical bonding between the boost pump canister and the pressure pick-up line, if not corrected, could result in arcing and potential ignition source inside the fuel tank during lightning strikes and consequent fuel tank explosion. To correct the unsafe condition, this directive mandates a detailed visual inspection of the fuel boost pump for the presence of anodized reducer couplings. All anodized couplings found are to be replaced with couplings having ion vapor deposition (IVD) coating.

Corrective Actions:

- Within 5000 hours air time after the effective date of this directive, carry out a detailed visual inspection for the presence of an anodized (blue colour) fuel boost pump reducer coupling according to the Accomplishment Instructions of Bombardier Service Bulletin (SB) 601R-28-057, dated 4 December 2003, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.
- 2. If the inspection of paragraph 1 above discovers that none of the fuel boost pump reducer coupling is anodized, no further action is required.
- 3. If the inspection of paragraph 1 above discovers the presence of any anodized fuel boost pump reducer coupling, prior to further flight, replace the anodized coupling with a coupling having ion vapour deposition coating according to the Accomplishment Instructions of the above-noted SB.

Authorization: For Minister of Transport, Infrastructure and Communities

B. Goyaniuk

Chief, Continuing Airworthiness

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